IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

WSOU INVESTMENTS, LLC D/B/A	§	**CIVIL ACTION 6:20-cv-00454-ADA**
BRAZOS LICENSING AND	§	**CIVIL ACTION 6:20-cv-00461-ADA**
DEVELOPMENT,	§	**CIVIL ACTION 6:20-cv-00465-ADA**
Plaintiff,	§	
	§	
v.	§	
	§	
MICROSOFT CORPORATION,	§	
Defendant.	§	
	§	

PLAINTIFF'S SUPPLEMENTAL CLAIM CONSTRUCTION BRIEF
ADDRESSING "TIME-AVERAGING INTERVAL"

"packet loss rate"[1]

WSOU's Proposed Construction	Defendant's Proposed Construction
the fraction of packets that are lost over a time interval suitable for the collected "data" to be probative of the "at least one path"	the fraction of packets that are lost over a suitable interval of time over which an average is taken

---

[1] In the table above, WSOU has inserted the parties' respective definitions for "suitable time-averaging interval" (as stated in *lexicography* for the "packet loss rate" term) into the parties' previously proposed constructions for the "packet loss rate" term.

Anticipating that the Court may seek input on how the lexicography in the specification for "packet loss rate" should *itself* be interpreted, WSOU's response brief states that "suitable time-averaging interval" at least encompasses the following embodiments: (1) a *fixed* time interval and (2) an *adaptively* determined time interval. Dkt. 52, 21.[2] Now that the Court has requested a proposed definition, a "suitable time-averaging interval" means "a time interval suitable for the collected 'data' to be probative of the 'at least one path'" (where quotation marks indicate claim language). Microsoft incorrectly proposes "an interval of time *over which an average is taken*." Microsoft leaves the Court (and ultimately the jury) to guess as to *what* exactly must be averaged over the time interval. Microsoft also overlooks that in the phrase "suitable time-averaging interval" the couplet "time-averaging" modifies "interval"—i.e., the couplet refers to *time* (not averaged *values*). Indeed, the word "averaging" is itself expressly tethered to "time" by a hyphen.

WSOU's refined construction accurately reflects disclosure in the specification surrounding the acknowledged lexicography (at 3:46-47). The paragraph immediately preceding the lexicographic statement explicitly addresses the "time interval" concept as follows:

> One important observation we have made is that information collected at one link of the network, relating to losses of correlated pairs of packets, ***may be probative of loss rates on other, downstream links of the network***. To put this observation into practice, we have defined a "pair" as two packets, destined for different end nodes, that were both transmitted from the root node within a time interval δ. The value of δ may be specified by the operator, or it may be determined adaptively. In many networks, there will be s ***high correlation between the losses of packets transmitted sufficiently close in time***, not least because if one packet is dropped due to buffer overflow, a packet following a short time later is likely to meet the same fate. Although useful values for δ will depend on the properties of the specific network of interest, typical values in a W-CDMA network could lie in the range 50-100 ms.

3:30-44 (emphasis added). Consistent with claims 1 and 6, this paragraph discloses the "important observation" that information collected at one point in a network may be ***probative*** of packet loss rates elsewhere along the same path. *Id*. The paragraph further teaches that the correlation will be "high" for "losses of packets transmitted sufficiently close in time, not least because if one

---

[2] WSOU still maintains the claim language should encompass all disclosed embodiments.

packet is dropped due to buffer overflow, a packet following a short time later is likely to meet the same fate." *Id*. An example time range is also provided. *Id*.

Consistent with the above disclosure, claim 1 recites "collecting data on downstream packet losses at a single collection point in a network" (8:13-14). Claim 6 recites analogous limitations in the context of a "monitoring device" (8:40-41). Claim 1 further recites, in part, "from the collected *data*, estimating a packet loss rate on *at least one path* . . . ." (8:20-21); and, again, claim 6 recites analogous limitations (8:47-48). This claim language reflects certain concepts in the block quotation above—i.e., that information collected at one point in a network may be *probative* of packet loss rates on a downstream path, provided a suitable time interval is used in measuring data at the collection point. In view of this intrinsic evidence, the statement "suitable time-averaging interval" (appearing in the lexicography) should be interpreted as "time interval suitable for the collected '*data*' to be *probative* of the '*at least one path*'" (where probative in this context refers to the "packet loss rate," which is the claim term being defined).

Importantly, "packet loss rate" is repeatedly described in the specification as something that is *measured* as a fraction of packets that are lost. *See*, *e.g.*, 3:46-47 (lexicographic statement in question); 5:35-36 ("The end-to-end loss rate from n_0 to n_4 is measurable"); 3:58-60 ("one quantity that is measurable . . . is the end-to-end packet loss rate"). The specification contains no unambiguous requirement or disclaimer to support an interpretation that the measurements *themselves* must be *averaged* over a given time interval, as Microsoft newly seeks to require through claim construction. Indeed, it would appear Microsoft's extraneous requirement would exclude preferred embodiments where *a count* of dropped packets is used to measure the faction of packets that are lost (*e.g.*, 3:45-5:27, including the discussion of "Algorithm 1" and Algorithm 2"). The question of packet loss may be binary (*e.g.*, a packet is either lost or it is not). This further underscores that *averaging* over an interval of time (as Microsoft proposes) is not necessarily required. For this additional reason, Microsoft's untethered construction should be rejected.

Dated: March 16, 2021   Respectfully submitted,

By: */s/ Ryan Loveless*
        James L. Etheridge
        Texas Bar No. 24059147
        Ryan S. Loveless
        Texas Bar No. 24036997
        Brett A. Mangrum
        Texas Bar No. 24065671
        Travis L. Richins
        Texas Bar No. 24061296
        Jeffrey Huang
        Brian M. Koide
        ETHERIDGE LAW GROUP, PLLC
        2600 E. Southlake Blvd., Suite 120 / 324
        Southlake, TX 76092
        Tel.: (817) 470-7249
        Fax: (817) 887-5950
        Jim@EtheridgeLaw.com
        Ryan@EtheridgeLaw.com
        Brett@EtheridgeLaw.com
        Travis@EtheridgeLaw.com
        Jhuang@EtheridgeLaw.com
        Brian@EtheridgeLaw.com

        Mark D. Siegmund
        State Bar No. 24117055
        mark@waltfairpllc.com
        LAW FIRM OF WALT, FAIR PLLC.
        1508 North Valley Mills Drive
        Waco, Texas 76710
        Telephone: (254) 772-6400
        Facsimile: (254) 772-6432

        Counsel for Plaintiff WSOU Investments, LLC

CERTIFICATE OF SERVICE

A true and correct copy of the foregoing instrument was served or delivered electronically via U.S. District Court [LIVE]- Document Filing System, to all counsel of record, on March 16, 2021.

                    /s/ James L. Etheridge
                    James L. Etheridge

3